



San Jacinto River Waste Pits Superfund Site

USACE Support



San Jacinto River Waste Pits

Oct 1964



South Impoundment

1965



Temporary Cap Construction Completed July 2011

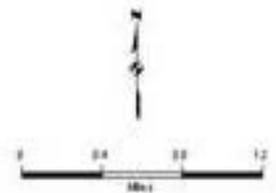


Previous USACE involvement:

- **Review of PRP modeling report.**
- **Review of PRP temporary cap design.**
- **Review of PRP draft Feasibility Study.**
- **Special Permit Area (EPA/USACE/TCEQ).**

San Jacinto River Waste Pits

-  Preliminary Perimeter - EPA (1977)
-  Permits Areas of Concern - USACE, EPA, TCEQ (1977)
-  1966 Original Perimeter of Improvements - EPA (1977)
-  Identified Improvements South of I-10 - EPA (1977)



Source:
 Aerial photos from DigitalGlobe 1/2000
 Preliminary Perimeter from EPA Region 6
 1966 Original Improvement was created by EPA Region 6 using 1966 aerial photos from USGS
 Improvements South of I-10 was created by EPA Region 6 using 1964 aerial photos from USGS
 Permits Area of Concern is from the USACE, EPA, and TCEQ

EPA makes no claim as to the accuracy of the data or its suitability for any particular use.

Map created February 10, 2011





The Issues:

- **San Jacinto River**
- **Community concerns**

San Jacinto River

- Upper Texas coast recorded 25 hurricanes, 7 of which were major (Category 3 to 5) storms.
- October 1994 storm greater than 100-year flood (1.6 times):
 - Major soil erosion – 8 pipelines ruptured & 29 undermined; 3000 homes destroyed.
 - 10 to 12-feet of bed scour south of the I-10.



IH-10

Barges

Lower San Jacinto River

San Jacinto River at I-10 (Photo: HCFCD)

Temporary Cap – Berm Erosion

- Western Berm erosion July 2012.
- Completion of repairs August 2012.



USACE Support

- **Should waste stay or should it go?**
- **Construction oversight (future - amend IAG).**

Engineer Research and Development Center (ERDC), Vicksburg MS.

U.S. Army Corps of Engineers

- Computer models – river flow & scour.
- Evaluation of remedial alternatives.
- Short & long term cap reliability? [storms, prop wash & barge strikes].
- Any migration through cap?
- Removal Best Management Practices.

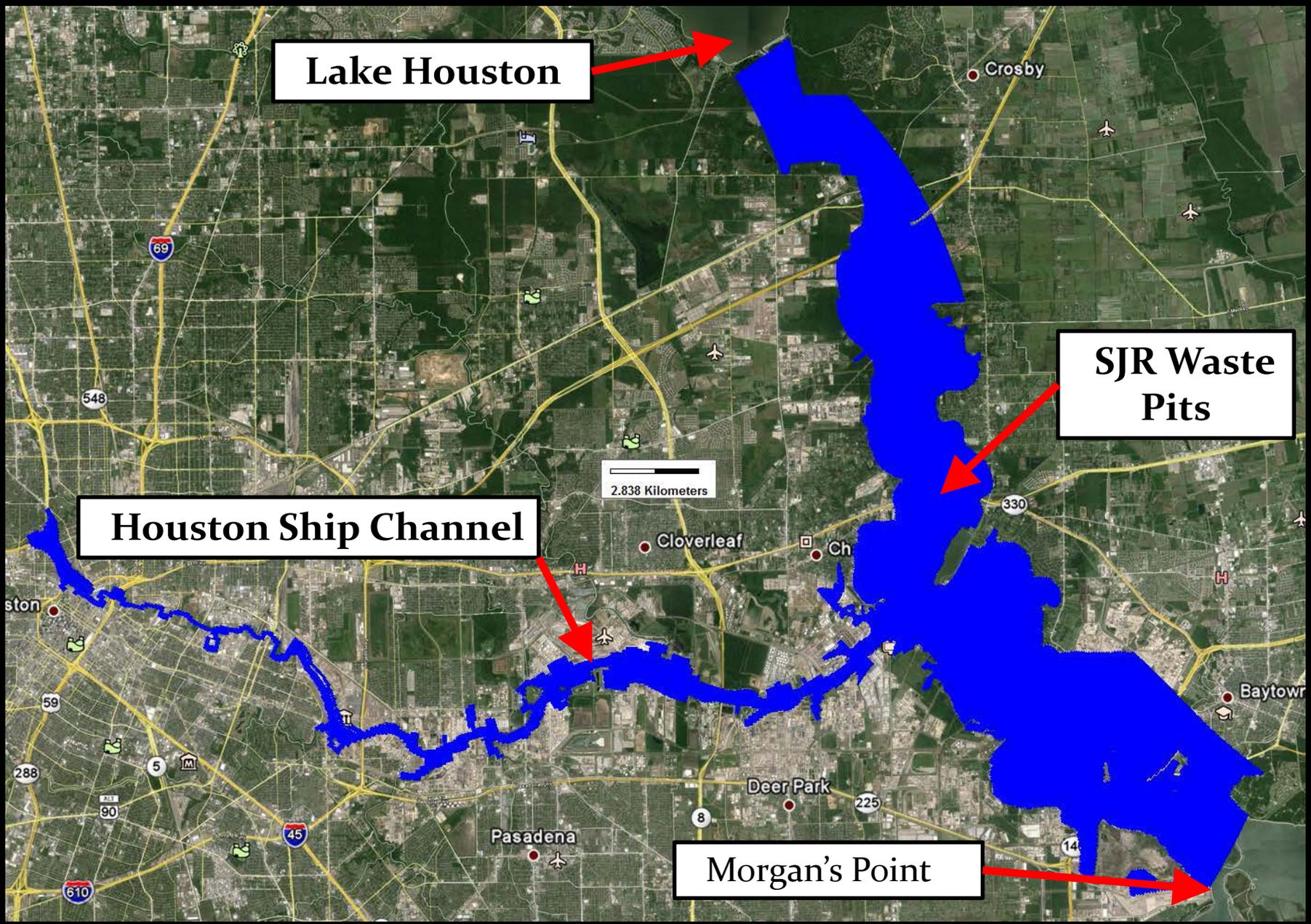
Lake Houston

SJR Waste Pits

Houston Ship Channel

Morgan's Point

2.838 Kilometers



U.S. Army Corps of Engineers

Completed work:

- New model calibrated.
- Design/construction review of entire cap.
- Assessed potential dioxin migration through cap.
- Assessed potential barge strike impacts.
- Case history of armor failures.
- Sediment re-suspension & residuals; BMPs.

